



BUCKET NO.: CRNT-0068

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

RECEIVED

In Re Application of:

Paul A. Kline et al.

Serial No.: 10/075,332

Filing Date: February 14, 2002

For: APPARATUS AND METHOD FOR COUPLING DATA TO AND FROM A
POWER LINE (AS AMENDED)

Confirmation No.: 8699

Group Art Unit: 2182

Examiner: Not yet known

APR 29 2003

Technology Center 2100

DATE OF DEPOSIT: 4/24/03

I HEREBY CERTIFY THAT THIS PAPER IS BEING
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AND TRADEMARKS, WASHINGTON, DC 20231.

TYPED NAME: Vincent J. Roccia
REGISTRATION NO.: 43,887

Assistant Commissioner for Patents
Washington, D.C. 20231

Dear Sir:

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 CFR § 1.56 and in accordance with 37 CFR §§ 1.97-1.98, information relating to the above-identified application is hereby disclosed. Inclusion of information in this statement is not to be construed as an admission that this information is material as that term is defined in 37 CFR § 1.56(b).

- ☒ In accordance with § 1.97(b), since this Information Disclosure Statement is being filed either within three months of the filing date of the above-identified application, within three months of the date of entry into the national stage of the above identified application as set forth in § 1.491, before the mailing date of a first Office Action on the merits of the above-identified application, or before the mailing date of a first Office Action after the filing of request for continued examination under § 1.114, no additional fees are required.

☐ In accordance with § 1.129(a), this Information Disclosure Statement is being filed in connection with ☐ the first or ☐ second After Final Submission, therefore:

☐ Certification in Accordance with § 1.97(e) is attached; or

☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.

☐ In accordance with § 1.97(c), this Information Disclosure Statement is being filed after the period set forth in § 1.97(b) above but before the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311, or before an action that otherwise closes prosecution in the application, therefore:

☐ Certification in Accordance with § 1.97(e) is attached;
or

☐ The fee of \$180.00 as set forth in § 1.17(p) is attached.

☐ In accordance with § 1.97(d), this Information Disclosure Statement is being filed after the mailing date of either a Final Action under § 1.113 or a Notice of Allowance under § 1.311 but before, or simultaneously with, the payment of the Issue Fee, therefore included are: Certification in Accordance with § 1.97(e); and the submission fee of \$180.00 as set forth in § 1.17(p).

☒ Copies of each of the references listed on the attached Form PTO-1449 are enclosed herewith.

☐ Copies of references listed on the attached Form PTO-1449 are enclosed herewith

EXCEPT THAT:

☐ In view of the voluminous nature of references [list as appropriate], and the likelihood that these references are available to the Examiner, copies are not enclosed herewith.

- ☐ In accordance with § 1.98(d), copies of the following references listed on the attached Form PTO-1449 are not enclosed herewith because they were previously cited by or submitted to the U.S. Patent and Trademark Office in patent application(s) for which a claim for priority under 35 U.S.C. § 120 have been made in the instant application:
- ☐ Copies of references [list as appropriate] listed on the attached Form PTO-1449 were previously cited by or submitted to the Patent and Trademark Office in prior application Serial No. , filed .
- ☐ If any of the foregoing publications are not available to the Examiner, Applicant will endeavor to supply copies at the Examiner's request.


Please charge any deficiency or credit any overpayment to Deposit Account No. 23-3050. This form is submitted in duplicate.

Enclosed is a copy of the PCT/US02/04300 Written Opinion dated March 21, 2003, which indicates the references considered to be relevant

English language abstracts have been provided for those listed references which are not in the English language.

Date:

4/24/03



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APR 28 2003 WRITTEN OPINION

International application No.
PCT/US02/04300

Supplemental Box

(To be used when the space in any of the preceding boxes is not sufficient)

that communication capability and flexibility are expanded by virtue of 2-way communication between two stations.

b) Modulators and demodulators would have been inherent of said transmitters and receivers indicated above, amplifiers would have been obvious for situations where signal strength requires amplification to meet specification of the communication circuitry, and filters would have been obvious where excessive noise is present.

c) Wireless transceiver is met by 205, 206 of Paull.

d) Coaxial cable receiver is met by Figs. 1 & 4 of Osterman wherein Fig. 1 shows the tapped receiver is communicating with coaxial cable 40, while the obvious use of a 2 way communicating transceiver is considered above.

e) It would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the invention taught by Osterman and Paull can be applied to other environments including various types of power cables such as one having at least one thousand volts.

f) It would have been obvious that the transceiver be implemented in the form of a known modem for communicating the data further along a communications network having other modems and routers, etc., or other communication devices including those requiring adherence to network related standards such as IEEE 802.11, in applications where a network is advantageous such as when data destinations are large in number and/or separated by vast distances.

g) Since the power line tapping and transceiver system is for communicating data from one destination to another through the power line as an intermediate medium, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that one or more destinations can be an intermediate one coupled to another power line using similar coupling and communicating arrangements.

IV. Claims 67 and 81 lack an inventive step under PCT Article 33(3) as being obvious over Osterman in view of Paull and Skinner, Sr. (US pat. #4,664,002).

1) In considering claims 67, Osterman made obvious all of the claimed subject matter as in claim 66, and furthermore:

a) Skinner, Sr. teaches in a similar system that the transceiver (32) can be fiber optic (14) type. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the claimed invention that the transceiver in a system such as taught by Osterman and Paull can be chosen to be of the fiber optic type if the data delivered is destined for optical fibers.

----- NEW CITATIONS -----

US 5,410,720 A (OSTERMAN) 25 April 1995, see Figs. 1 & 4.

US 5,994,998 A (FISHER et al.) 30 November 1999, see Figs. 1-3.

US 4,016,429 A (VERCELLOTTI et al.) 05 April 1977, see Figs. 4-7.

US 3,641,536 A (PROSPRICH) 08 February 1972, see Figs. 5a-5b.

US 5,426,360 A (MARAIO et al.) 20 June 1995, see Figs. 1-4 & 7.

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2182

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	2	3,641,536	02/08/72	Prosprich	340	870.15
	3	3,702,460	11/07/72	Blose	340	150
	4	3,810,096	05/07/74	Kabat et al.	340	147 R
	5	3,962,547	06/08/76	Pattantyus-Abraham	179	2.5 R
	6	3,964,048	06/15/76	Lusk et al.	340	310 R
	7	3,973,240	08/03/76	Fong	340	151
	8	4,004,110	01/18/77	Whyte	179	170 J
	9	4,016,429	04/05/77	Vercellotti et al.	307	149
	10	4,057,793	11/08/77	Johnson et al.	340	310 R
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	12	4,188,619	02/12/80	Perkins	340	310 R
	13	4,239,940	12/16/80	Dorfman	179	2.51
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	15	4,323,882	04/06/82	Gajjar	340	310 R
	16	4,357,598	11/02/82	Melvin, Jr.	340	310 A
	17	4,408,186	10/04/83	Howell	340	310 A
	18	4,442,492	04/10/84	Karlsson et al.	364	464
	19	4,457,014	06/26/84	Bloy	381	98
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	22	4,683,450	07/28/87	Max et al.	333	202
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	24	4,697,166	09/29/87	Warnagiris et al.	340	310 R
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	32	5,185,591	02/09/93	Shuey	340	310 A
	33	5,257,006	10/26/93	Graham et al.	340	310A
	34	5,301,208	04/05/94	Rhodes	375	36
	35	5,369,356	11/29/94	Kinney et al.	324	142
	36	5,406,249	04/11/95	Pettus	340	310.06
	37	5,410,720	04/25/95	Osterman	725	150
	38	5,426,360	06/20/95	Maraio et al.	324	126
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	40	5,497,142	03/05/96	Chaffanjon	340	310.06
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	46	5,691,691	11/25/97	Merwin et al.	340	310.02
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	67	6,144,292	11/07/00	Brown	340	310.02
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	73	6,239,722 B1	05/29/01	Colton et al.	340	870.02
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	103	S. N. 10/293,799	11/13/02	Huebner		
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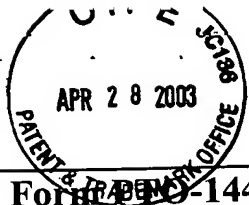
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	105	S.N. 10/292,714	11/12/02	Cope		
	106	S.N. 10/315,725	12/10/02	Cope et al.		
	107	S.N. 10/319,317	12/13/02	Mollenkopf et al.		
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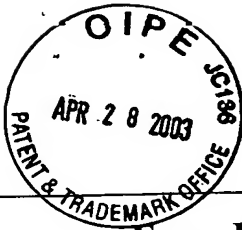
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		Applicant Paul A. Kline et al.	
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139	"Signalling on Low-Voltage Electrical Installations in the Frequency Band 3kHz to 148.5kHz-Part 4: Filters at the Interface of the Indoor and Outdoor Electricity Network", <i>CLC SC 105A (Secretariat)</i> May 1992 , 62, 1-11		
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152	Esmailian, T. et al., "A Discrete Multitone Power Line Communication System", <i>Department of Electrical and Computer Engineering</i> , University of Toronto, Ontario Canada, 2000 IEEE , pp 2953-2956	
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EXAMINER**DATE CONSIDERED**

